



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUL 10 2012

Mr. Doug White
Florida Dept. of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

and

Mr. Doug Jones
Florida Dept. of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road (MS 4505)
Tallahassee, FL 32399-2400

Subject: West Palm Beach Gasification Plant
2nd Street and Sapodilla Avenue
West Palm Beach, Florida

Dear Mr. White and Mr. Jones:

The U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) conducted a Removal Site Evaluation (RSE) at the above referenced site for potential removal action eligibility under the National Contingency Plan (NCP).

Based on the information collected during the RSE, the On-Scene Coordinator (OSC) recommends this site be given a **no further action** for removal eligibility under EPA's Superfund Removal Program. (See enclosed RSE memo)

This determination does not preclude any other investigation or response action by other parties which may still be appropriate for this site. Should site conditions change or additional information become available, ERRB will re-evaluate this site as necessary.

Should you have any questions concerning ERRB's determination, please contact Terry Stilman, OSC, at (404) 562-8748 or Matt Taylor, Chief of Removal Operations Section, at (404) 562-8759.

Sincerely,

A. Shane Hitchcock, Chief
Emergency Response & Removal Branch

Enclosure

cc: Dawn Taylor, Tony Moore, Debbie Jourdan, Terry Stilman, Kerri Sanders, Alyssa Hughes,
Matt Taylor

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
West Palm Beach Gasification Plant
Removal Site Evaluation POLREP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Removal Site Evaluation
West Palm Beach Gasification Plant
2nd Street and Sapodilla Avenue
West Palm Beach, Palm Beach County, Florida

Latitude: 26.715359 ° N
Longitude: 80.058667 ° W

To: Matt Taylor, USEPA R4 ERRB
From: Terry Stilman, On-Scene Coordinator
Date: July 6, 2012
Reporting Period: January 24, 2011 - July 6, 2012

1. Introduction

Site Number: B4C6
Response Authority: CERCLA
Response Type: Time-Critical
Response Lead: Florida Department of Environmental Protection
Incident Category: Removal Assessment
NPL Status: Non NPL

1.1 Site Description

The Florida Public Utilities Company (FPUC) operated a manufactured gas plant at the property from 1916 to 1959. The Florida Department of Environmental Protection (FDEP) and FPUC, under an administrative order continue to investigate contamination at the Site. Groundwater impacts from the Site have been observed. EPA received a request for assistance from FDEP to perform a Removal Site evaluation. Based on existing data and the potential for impact to adjacent residential properties, EPA collected soil gas and crawl space air samples to gauge the contamination plume's potential impact to humans living on or near the plume.

1.2 Preliminary Removal Assessment/Removal Site Inspection Results

FDEP has been working with FPUC since 1991 to identify and monitor the plume. FPUC has completed and submitted a feasibility study for the site, which recommended installing air sparging and

groundwater extraction wells to facilitate aerobic bioremediation and physical removal of organic constituents.

1.3 Site Location

The FPUC facility is located at the corner of Sapodilla Avenue and 2nd Street in West Palm Beach, Florida. The immediate surrounding area is a mix of commercial property along the main thoroughfares and residential homes between the main roads. The site is bounded on two sides by residential properties, including several apartment buildings immediately to the north along 2nd Street. For purposes of the evaluation, the site includes the residential properties along the north side of 2nd Avenue as well as several additional properties to the east.

2.0 Removal Site Evaluation

During the week of January 24, 2011, the EPA Region 4 Emergency Response and Removal Branch (ERRB), assisted by the Environmental Response Team (ERT) and the Superfund Technical Assessment and Response Team (START), conducted soil gas, crawlspace air, and ambient air sampling throughout the neighborhood north of the facility. A total of 29 samples were collected from 18 residences. Twenty-two soil gas samples were collected from open areas of the properties (areas not directly beneath buildings). Two ambient air samples were also collected as background controls. These were analyzed on-site by the ERT mobile laboratory for benzene, toluene, ethylbenzene, and total xylene, commonly referred to as "BTEX". ERT also collected two soil gas samples from below foundation slabs, three samples from crawlspaces, and another 2 ambient background samples using SUMMA canisters. These were analyzed at a remote laboratory for total volatile organic compounds (VOCs) using EPA Method TO-15.

Of the samples analyzed on site by the mobile lab, 13 showed detectable levels of BTEX. Of the BTEX constituents, however, only benzene was detected in excess of the Regional Screening Level (RSL) for ambient air (0.31 micrograms per cubic meter of air [$\mu\text{g}/\text{m}^3$]), and this at 9 of the 13 locations. None of these levels were, however, greater than the Region 4 Removal Action Level (RAL) of $31.2 \mu\text{g}/\text{m}^3$. No BTEX concentrations were detected in the ambient background samples.

The laboratory-analyzed samples also showed BTEX concentrations above their respective RSLs. Additionally, one sample did exceed the $7.2 \mu\text{g}/\text{m}^3$ RAL for naphthalene, returning $8.1 \mu\text{g}/\text{m}^3$.

ERRB returned to the site in November, 2011. Assisted this time by the EPA Science and Ecosystem Support division (SED) and START, sub-slab soil vapor and crawlspace air samples were collected at 7 residences. Two ambient outdoor background samples were also collected. All of the samples, both sub-slab and ambient, showed detectable levels of various VOCs, although none at levels approaching the RSLs or RALs. Naphthalene was detected at three sampling locations, exceeding the RSL of $0.072 \mu\text{g}/\text{m}^3$ at all of them. Additionally, one of these locations exceeded the $7.2 \mu\text{g}/\text{m}^3$ RAL for ambient indoor residential air at $33 \mu\text{g}/\text{m}^3$. A re-sampling of the residence identified in January with naphthalene levels above the RAL showed the levels had dropped to below the RAL, but were still estimated to be at $3.0 \mu\text{g}/\text{m}^3$.

The Region 4 Technical Services Section (TSS) reviewed the data during a human health risk assessment. In order to gauge the potential impact soil vapor can have on a residential structure, EPA guidelines call for an attenuation factor of 0.1 when assessing a soil vapor's impact on humans residing inside the building. This factor more accurately reflects the contribution of subsurface soil vapor to the overall ambient air inside the residence. The underlying assumptions for this generic model are that site-specific subsurface characteristics will tend to reduce, or attenuate, vapor concentrations as vapors

migrate upward from the source and that site-specific building characteristics will tend to further dilute the vapors as they mix with the air in the building. TSS applied the attenuation factors and determined the measured concentrations of naphthalene in the subsurface soil vapor pose no immediate threat to the health of residents residing inside the structures.

3.0 Anticipated Activities

Response actions at the site are currently led by FDEP. Based on a review of the removal site evaluation criteria presented in 40 CFR Section 300.415, the OSC has determined that no additional action by EPA ERRB is warranted at this time. However, it may be prudent for FPUC working with FDEP to conduct additional sampling. As recommended by EPA's TSS:

Although no detected sub-slab concentrations exceeded RALs suggesting the current need for a removal action, several locations had concentrations greater than their respective RSLs, indicating the potential for vapor migration into a building and suggesting that further assessment of the vapor intrusion pathway may be needed. Based on information collected to date and the potential for vapor intrusion to occur, additional sampling is warranted to fill some important data gaps. TSS has suggested that any future investigations also include indoor air samples, ambient air samples and soil gas samples (particularly sub-slab soil gas samples) and that the sample collected at the same location and time which may yield a more comprehensive understanding of the site. Additionally, indoor air monitoring that reflects seasonal variations for the site should provide a basis for a better understanding of exposure estimates. As a guideline, a late summer/early fall sampling in addition to a late winter/early spring sampling period provides adequate temporal coverage. Any further investigations should include the following residences:

815 2nd St Apt1
815 2nd St Apt3
809 2nd St Apt 1
817 2nd Street Apt 2
817 2nd Street Apt 4

Other homes in the vicinity of the plume (if known) may also warrant sampling if they have been impacted by vapor intrusion.

Concur - Muth Taylor
7/3/12